

## REMARKS

### **I. Status of the Application**

Claims 1-15 are pending in the application. Claims 1-6 and 9-13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 7,029,784 to Carlstrom ("Carlstrom") in view of U.S. Pre-Grant Publication No. 2002/0022170 to Franklin et al. ("Franklin"), U.S. Patent No. 4,877,693 to Baker ("Baker"), and further in view of U.S. Patent No. 2,925,456 to Beusker et al. ("Beusker"). Claims 7, 8, 14 and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Carlstrom, Franklin, Baker, Beusker, as applied to claims 1 and 9 and further in view of U.S. Patent No. 6,007,933 to Jones ("Jones").

Applicants respectfully request reconsideration of claims 1-15 in view of the following remarks. Each of the Examiner's rejections is addressed below

### **II. The Claims are Non-Obvious over Carlstrom in view of Franklin, Baker, and Beusker**

Claims 1-6 and 9-13 stand rejected under 35 U.S.C. § 103(a) over Carlstrom in view of Franklin, Baker, and Beusker. This rejection is respectfully traversed.

Carlstrom teaches a flow field plate with two interlocking layers having lands that form internal channels therebetween. Franklin is cited as disclosing a single or multiple manifold(s) for the delivery and removal of reactants and reactant products to and from a separator plate. Baker is cited as disclosing the passage of fuel through fuel chambers that are coupled to entry ports of anode chambers. Beusker is cited as disclosing a separator having two corrugated elements nested together to create passages therebetween.

Applicants respectfully submit that the proposed combination of Carlstrom and Beusker does not disclose or make obvious a first and second plate with ribs of the second plate having a

height greater than a height of ribs of the first plate such that the second plate can be nested with the first plate so as to define a plurality of center flow channels extending between the first and second plates.

As seen in Fig. 3, Beusker teaches a separator for electric accumulators having a porous filtering element 1, an intermediate corrugated and perforated plate 2, and a glass mat 3. Beusker does not teach flow channels between plates. The perforations of plate 2 and the pores of filter 1 would defeat the purpose of the claimed flow channels. Accordingly, one skilled in the art would not be taught by the proposed combination of Beusker and Carlstrom to provide the required first and second plates with ribs of a height such that the plates can be nested to define a plurality of center flow channels extending between the first and second plates.

Franklin and Baker each fail to overcome the deficiencies of Carlstrom and Beusker noted above. Neither Franklin nor Baker disclose or make obvious plates with ribs of differing heights that nest with one another to define a plurality of center flow channels.

Since this required limitation of independent claims 1 and 9 is not found in any of Carlstrom, Franklin, Baker, or Beusker alone or in combination, the rejection is improper and should be withdrawn.

**III. Claims 7, 8, 14 and 15 are Non-Obvious over Carlstrom, Franklin et al., Baker, and Beusker in view of Jones**

Claims 7, 8, 14 and 15 have been rejected under 35 U.S.C. § 103(a) over Carlstrom, Franklin, Baker, Beusker, and Jones. Jones is cited as disclosing wires disposed between a bipolar plate and electrode to distribute reactants and products and to provide deformability and resiliency in the cell. This rejection is respectfully traversed.

For the reasons stated above, the Examiner's combination of Carlstrom, Franklin, Baker, and Beusker fails to teach or suggest the subject matter of claims 1 and 9, and Jones fails to cure

the deficiencies of these references. Jones simply does not disclose plates with ribs of differing heights that nest with one another to define a plurality of center flow channels. Consequently, the rejection is improper and should be withdrawn.

#### IV. **Conclusion**

Reconsideration and allowance of all the pending claims is respectfully requested. If a telephone conversation with Applicants' attorney would expedite prosecution of the above-identified application, the Examiner is urged to call the undersigned at (617) 720-9600.

Respectfully submitted,

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